

analyzing means receiving said output signals from said first and second detectors for calculating the speed and acceleration of the motor vehicle.

Amend claim 2 as follows:

2. (Amended) The apparatus according to claim 1 wherein the analyzing means further comprises:

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distance on one side of the roadway and arranged at a height above the roadway so as each to be interrupted by a front wheel and a rear wheel of the motor vehicle;

detector means arranged at a side of the roadway opposite said one side for receiving said first and second [visible laser] beams and producing respective output signals indicating interruptions of said first and second [visible laser] beams by the front and rear wheels of the motor vehicle;

measuring means for receiving said output signals from said detector means for producing time measurements at each occurrence of said interruptions of said first and second [visible laser] beams and for producing time measurements at each resumption of each interrupted first and second [visible laser] beams; and

calculating means receiving said time measurements from said measuring means for calculating an acceleration of the motor vehicle based on said predetermined distance.

Please add the following new claims:

10. (New) Apparatus for determining speed and/or acceleration of a vehicle comprising:

at least one radiation source projecting radiation across the vehicle's path;

at least one detector receiving at least a portion of the projected radiation; and

18. (New) A method for determining speed and/or acceleration of a vehicle comprising the steps
of:

identifying a first time when a first portion of the vehicle breaks the projected radiation at a first location:

identifying a second time when the first portion of the vehicle breaks the projected radiation at a second location; and

calculating the vehicle's speed using the first and second times and a predetermined distance between the first location and the second location.

19. (New) The method of claim 18, further comprising the steps of:

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identifying a third time when a second portion of the vehicle breaks the projected radiation at the first location;

identifying a fourth time when the second portion of the vehicle breaks the projected radiation at the second location; and

calculating the vehicle's speed and/or acceleration using the first, second, third, and fourth times and the predetermined distance between the first location and the second location.

20. (New) The method of claim 18 further comprising the steps of:

identifying a fifth time when the first portion of the vehicle leaves the projected radiation at the first location;

identifying a sixth time when the first portion of the vehicle leaves the projected radiation at the second location;

identifying a seventh time when the second portion of the vehicle leaves the projected radiation at the first location;